

## LISTING OF THE CLAIMS

5 1. (currently amended) An adhesive composition comprising

a) from 15 to 50 percent by weight of the total weight of the adhesive

composition of a block copolymer corresponding to the following formula:

$I-(B)_{n^*}-(A)_m$ , in which  $n^*$  is an integer greater than or equal to 1,  $m$  an integer less than or equal to  $n^*$ ,  $B$  a polymer block directly bonded to the core  $I$  via a covalent bond, obtained by the polymerization of a mixture of monomers ( $B_0$ ) comprising:

- from 92 to 98% by weight of at least one monomer ( $B_1$ ) chosen from the group consisting of linear or branched  $C_1$ - $C_{12}$  alkyl acrylates,

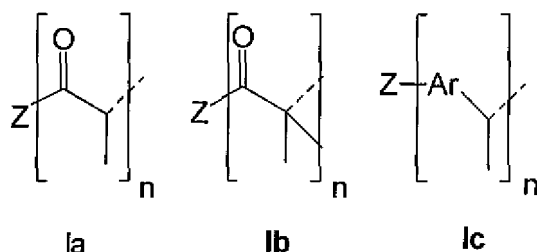
15 - from 2 to 8% by weight of at least one monomer ( $B_2$ ) chosen from acids and their derivatives, and their salts,

$A$  is a polymer block directly bonded to the  $B$  block via a covalent bond, obtained by the polymerization of a mixture of monomers ( $A_0$ ) comprising:

- from 95 to 100% by weight of at least one monomer ( $A_1$ ) chosen from the group consisting of methacrylic monomers, styrene monomers and their derivatives,

20 - from 0 to 5% by weight of at least one monomer ( $A_2$ ) chosen from acids and their derivatives,

the core  $I$  being an organic group having  $n$ , greater than or equal to 1, carbon atoms to which are attached the  $B$  blocks via one of the valences of these carbon atoms, with core  $I$  corresponding to one of the following formulae:



in which  $Ar$  denotes a substituted aromatic group and  $Z$  is a polyfunctional organic or inorganic radical with a molar mass of greater than or equal to 14,  $Z$  is associated with  $n$  functional groups of acryl type in the formula Ia, with  $n$

functional groups of methacryl type in the formula Ib and with n functional groups of styryl type in Ic;

b) from 35 to 50 percent by weight of the total weight of the adhesive composition of at least one tackifying resin; and

5 c) from 10 to 30 percent by weight of the total weight of the adhesive composition of at least one plasticizer,

wherein the said polyfunctional organic radical is selected from the group of radicals consisting of: 1,2-ethanedioxy, 1,3-propanedioxy, 1,4-butanedioxy, 1,6-hexanedioxy, 1,3,5-tris(2-ethoxy)cyanuric acid, polyaminoamines,  
10 polyethyleneamines, 1,3,5-tris(2-ethylamino)cyanuric acid, polythioxy, phosphonate and polyphosphonate.

2. (cancelled)

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3. (withdrawn) The adhesive composition according to Claim 1, wherein the said polyfunctional inorganic radical is chosen from the complexes of formula  $M^{n+}O_n^-$ , in which M is a magnesium, calcium, aluminum, titanium, zirconium, chromium, molybdenum, tungsten, manganese, iron, cobalt, nickel, palladium, platinum,  
20 copper, silver, gold, zinc or tin atom.

4. (previously presented) The adhesive composition according to Claim 1, wherein  $B_0$  comprises:

- from 92 to 98% by weight of monomers  $B_1$  and
- 25 - from 2 to 8% by weight of monomers  $B_2$ .

5. (previously presented) The adhesive composition according to Claim 1, wherein  $B_2$  is acrylic acid.

30 6. (previously presented) The adhesive composition according to Claim 1, wherein  $A_0$  comprises:

- from 95 to 98% by weight of monomers  $A_1$  and
- from 2 to 5% by weight of monomers  $A_2$ .

7. (currently amended) The adhesive composition according to Claim 1, wherein A<sub>2</sub> is preferably methacrylic acid.
8. (previously presented) The adhesive composition according to Claim 1, wherein the B block represents from 50 to 95% by weight of the total weight of the said copolymer.
9. (previously presented) The adhesive composition according to Claim 1, wherein the B block has a Tg of less than 0°C.
10. (previously presented) The ~~copolymer~~ adhesive composition according to Claim 1, wherein the B block has a weight-average mass of between 2000 and 300 000 g/mol, and a polydispersity index of between 1 and 3.
11. (previously presented) The adhesive composition according to Claim 1, wherein the A block has a Tg of greater than ambient temperature.
- 12-16. (cancelled)
17. (cancelled)
18. (previously presented) Composition according to Claim 1, wherein the plasticizer is chosen from trimellitate oils, or predominantly naphthenic oils.
19. (previously presented) Composition according to Claim 1, wherein the tackifying resin is chosen from the group consisting of resins based on rosins, on rosin ester, on polyterpene, on hydroxylated polyester, on terpene styrene, on pentaerythritol terpene or on terpene phenol.
20. (previously presented) The adhesive composition of Claim 1 comprising an adhesive tape or label.
21. (canceled)

22. (currently amended) The adhesive composition of Claim 1 comprising at least one block copolymer corresponding to the following formula:

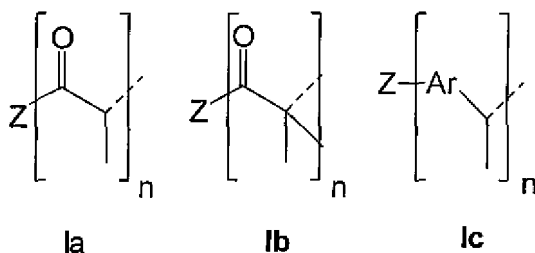
$I-(B)_{n^*}-(A)_m$ , in which  $n^*$  is an integer greater than or equal to 1,  $m$  an integer less than or equal to  $n^*$ ,  $B$  a polymer block directly bonded to the core  $I$  via a covalent bond, obtained by the polymerization of a mixture of monomers ( $B_0$ ) comprising:

- from ~~90 to 100~~ 92 to 98% by weight of at least one monomer ( $B_1$ ) chosen from the group consisting of linear or branched  $C_1$ - $C_{12}$  alkyl acrylates,
- from ~~0 to 10~~ 2 to 8% by weight of at least one monomer ( $B_2$ ) chosen from acids and their derivatives, and their salts,

$A$  is a polymer block directly bonded to the  $B$  block via a covalent bond, obtained by the polymerization of a mixture of monomers ( $A_0$ ) comprising:

- from 95 to - 98% by weight of at least one monomer ( $A_1$ ) chosen from the group consisting of methacrylic monomers, styrene monomers and their derivatives,
- from -2 to 5% by weight of at least one monomer ( $A_2$ ) chosen from acids and their derivatives,

the core  $I$  being an organic group having  $n$ , greater than or equal to 1, carbon atoms to which are attached the  $B$  blocks via one of the valences of these carbon atoms, with core  $I$  corresponding to one of the following formulae:



in which  $Ar$  denotes a substituted aromatic group and  $Z$  is a polyfunctional organic or inorganic radical with a molar mass of greater than or equal to 14,  $Z$  is associated with  $n$  functional groups of acryl type in the formula Ia, with  $n$  functional groups of methacryl type in the formula Ib and with  $n$  functional groups of styryl type in Ic,

wherein the said polyfunctional organic radical is selected from the group of radicals consisting of: 1,2-ethanedioxy, 1,3-propanedioxy, 1,4-butanedioxy, 1,6-hexanedioxy, 1,3,5-tris(2-ethoxy)cyanuric acid, polyaminoamines,

polyethyleneamines, 1,3,5-tris(2-ethylamino)cyanuric acid, polythioxy,  
phosphonate and polyphosphonate.